

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for modulating an information signal in a telecommunication system, in which spreading codes are used for discriminating between user signals, said codes being allocated for incoming call requests by selecting them from one or more code structures having codes of different bit rates, comprising:

- a) noting a desired bit rate of a code to be allocated for an incoming call request,
- b) determining the availability of codes having the desired bit rate;
- c) if there is one available code of the desired bit rate, allocating the one available code of the desired bit rate to said incoming call request; and
- d) if there is more than one code of the desired bit rate available, allocating a code in accordance with pre-selected rules so as to prioritize codes preserving a the highest possible number of available higher bit rate codes and to maximize the probability of future release of a higher bit rate code.

2. (Previously Presented) The method of claim 1, further comprising:
assigning the incoming request to another code structure if a transfer capacity would be exceeded.

3. (Previously Presented) The method of claim 1, further comprising:
blocking an incoming call request if a transfer capacity would be exceeded by said incoming call request.

4. (Canceled).

5. (Canceled).

6. (Canceled).

7. (Currently Amended) The method of claim 1, wherein codes are prioritized by:

a) determining an unavailability of shorter length codes relating to available free codes of the desired bit rate,

b) choosing the set of codes among the free codes having related shorter length codes with the highest ~~unavailabilities~~ degree of unavailability, and

c) repeating the foregoing step for related shorter length codes until the root code is reached, and finally choosing a code from the resulting ~~sets~~ set of codes.

8. (Canceled).

9. (Currently Amended) A method for modulating an information signal in a telecommunication system, in which spreading codes are used for discriminating between user signals, said codes being allocated for incoming call requests by selecting them from one or more code structures having codes of different bit rates, comprising:

a) noting a rate of a code to be allocated for an incoming call request,

b) determining an availability of one or more codes having the desired bit rate, and

c) performing a code reallocation if no code of the desired bit rate is available by assigning the incoming request to an unavailable code and reallocating ~~using~~ related, used lower bit rate codes to release the assigned unavailable code.

10. (Currently Amended) The method of claim 9, further comprising:

choosing as a preferred unavailable code one minimizing the total number of ~~changes of already allocated codes~~ code reallocations.

11. (Previously Presented) The method of claim 9, further comprising:

choosing as a preferred unavailable code one having the lowest number of assigned lower bit rate codes.

12. (Previously Presented) The method of claim 9, further comprising:

performing reallocation of used codes either by allocating or reallocating in accordance with the same rules as used for allocating codes to an incoming request.

13. (Previously Presented) The method of claim 9, further comprising:

choosing as a preferred unavailable code one having a lowest degree of unavailability.

14. (Currently Amended) The method of claim 9, further comprising:

choosing as a preferred unavailable code for reallocation one having the lowest number of assigned lower bit rate codes in its subtree, and, in case there is more than one such unavailable code, choosing one having a lowest unavailability level.

15. (Currently Amended) A system for modulating an information signal in a telecommunication system, in which spreading codes are used for discriminating between user signals, said codes being allocated for incoming call requests by selecting them from one or more code structures having codes of different bit rates, comprising:

a) means for noting a desired bit rate of a code to be allocated for an incoming call request,

b) means for determining the availability of codes having the desired bit rate,

c) means for allocating the one available code of the desired bit rate if there is one available code of the desired bit rate to said incoming call request,

d) means for allocating a code in accordance with pre-selected rules if there is more than one code of the desired bit rate available so as to prioritize codes preserving a the highest

possible number of available higher bit rate codes and to maximize a probability of future release of a higher bit rate code.

16. (Currently Amended) The system of claim 15 ~~12~~, further comprising:

means for assigning the incoming request to another code structure if a transfer capacity would be exceeded.

17. (Previously Presented) The system of claim 15, further comprising:

means for blocking an incoming call request if a transfer capacity would be exceeded by said incoming call request.

18. (Canceled)

19. (Canceled).

20. Canceled).

21. (Currently Amended) The system of claim 15, further comprising means for prioritizing codes by including:

a) means for determining an unavailability degree of shorter length codes relating to available free codes of desired bit rate, and

b) means for choosing the set of codes among the free codes having related shorter length codes with the highest unavailability degrees, ~~and~~

e) ~~repeating the foregoing step for~~ wherein the means for choosing chooses the set of codes among the free codes having related shorter length codes until the root code is reached,
and finally ~~choosing~~ chooses a code from the resulting set ~~sets of code codes~~.

22. (Canceled).

23. (Currently Amended) A system for modulating an information signal in a telecommunication system, in which spreading codes are used for discriminating between user

signals, said codes being allocated for incoming call requests by selecting them from one or more code structures having codes of different bit rates, comprising:

- a) means for noting a desired bit rate of a code to be allocated for an incoming call request,
- b) means for determining the availability of codes having the desired bit rate; and
- c) means for performing reallocating if no code of the desired bit rate is available by assigning the incoming request to an unavailable code, and reallocating ~~used~~ related, used lower bit rate codes to release the assigned unavailable code.

24. (Currently Amended) The system of claim 23, further comprising:

means for choosing as a preferred unavailable code one minimizing the total number of ~~changes of already allocated codes~~ code reallocations.

25. (Previously Presented) The system of claim 23, further comprising:

means for choosing as a preferred unavailable code one having the lowest number of assigned lower bit rate codes.

26. (Previously Presented) The system of claim 23, further comprising:

means for performing reallocation of used codes either by allocating or reallocating in accordance with the same rules as used for allocating codes to an incoming request.

27. (Currently Amended) The system of claim 23, further comprising:

means for choosing as a preferred unavailable code one having a lowest degree of unavailability.

28. (Currently Amended) The system of claim 23, further comprising:

means for choosing as a preferred unavailable code for reallocation one having the lowest number of assigned lower bit rate codes in its subtree, and in case there is more than one such unavailable code, for choosing one having a lowest unavailability level.

29. (Canceled).

30. (Currently Amended) A computer program to be used in a telecommunication system, in which communication system a spreading code is used in the modulation to discriminate between user signals, the code being allocated from a set of codes of different levels in such a way that the highest possible number of higher bit rate codes are preserved, comprising a computer usable medium having computable readable code embodied therein to carry out the following:

a) noting a desired bit rate of a code to be allocated to an incoming call request;
b) determining an availability of the different codes having the desired bit rate;
c) if there is one available code of the desired bit rate, allocating the one available code of the desired bit rate to said incoming call request; and

d) if there is more than one code of the desired bit rate available, allocating a code in accordance with pre-selected rules in such a way that the selection of a code to be allocated is performed so as to prioritize codes preserving a the highest possible number available higher bit rates codes and to maximize the probability of future release of a higher bit rate code.

31. (Currently Amended) ~~A computer program to be used in a telecommunication system, in which communication system a spreading code is used in the modulation to discriminate between user signals, the code being allocated from a set of codes of different levels in such a way that the highest possible number of higher bit rate codes are preserved, comprising a~~

~~computer usable medium having computable readable code embodied therein to carry out the following:~~

- ~~a) noting a desired bit rate of a code to be allocated to an incoming call request;~~
- ~~b) determining an availability of the different codes having the desired bit rate;~~
- ~~c) if there is one available code of the desired bit rate, allocating the one available code of the desired bit rate; and~~
- ~~d) if there is more than one code of the desired bit rate available, allocating a code in accordance with pre-selected rules in such a way that the selection of a code to be allocated is performed so as to prioritize codes preserving a highest possible number available higher bit rates codes and to maximize the probability of future release of a higher bit rate code;~~

The computer program of claim 30, wherein the code is further embodied to carry out the steps of claim 2.

32. (Currently Amended) ~~A computer program to be used in a telecommunication system, in which communication system a spreading code is used in the modulation to discriminate between user signals, the code being allocated from a set of codes of different levels in such a way that the highest possible number of higher bit rate codes are preserved, comprising a computer usable medium having computable readable code embodied therein to carry out the following:~~

- ~~a) noting a desired bit rate of a code to be allocated to an incoming call request;~~
- ~~b) determining an availability of the different codes having the desired bit rate;~~
- ~~c) if there is one available code of the desired bit rate, allocating the one available code of the desired bit rate; and~~

~~d) if there is more than one code of the desired bit rate available, allocating a code in accordance with pre-selected rules in such a way that the selection of a code to be allocated is performed so as to prioritize codes preserving a highest possible number available higher bit rates codes and to maximize the probability of future release of a higher bit rate code,~~

The computer program of claim 30, wherein the code is further embodied to carry out the steps of claim 3.

33. (Currently Amended) ~~A computer program to be used in a telecommunication system, in which communication system a spreading code is used in the modulation to discriminate between user signals, the code being allocated from a set of codes of different levels in such a way that the highest possible number of higher bit rate codes are preserved, comprising a computer usable medium having computable readable code embodied therein to carry out the following:~~

~~a) noting a desired bit rate of a code to be allocated to an incoming call request;~~
~~b) determining an availability of the different codes having the desired bit rate;~~
~~c) if there is one available code of the desired bit rate, allocating the one available code of the desired bit rate; and~~

~~d) if there is more than one code of the desired bit rate available, allocating a code in accordance with pre-selected rules in such a way that the selection of a code to be allocated is performed so as to prioritize codes preserving a highest possible number available higher bit rates codes and to maximize the probability of future release of a higher bit rate code,~~

The computer program of claim 30, wherein the code is further embodied to carry out the steps of claim 7.

34. (Currently Amended) Apparatus for modulating an information signal in a telecommunication system, in which spreading codes are used for discriminating between user signals, said codes being allocated for incoming call requests by selecting them from one or more code structures having codes of different bit rates, comprising electronic circuitry configured to:

note a rate of a code to be allocated for an incoming call request,

determine the availability of codes having the desired bit rate, and

perform reallocating if no code of the desired bit rate is available by assigning the

incoming request to an unavailable code and reallocating ~~used~~ related, used lower bit rate codes to release the assigned unavailable code.

35. (Currently Amended) The apparatus of claim 34, the electronic circuitry further configured to:

choose as a preferred unavailable code one minimizing the total number of ~~changes of already allocated codes~~ code reallocations.

36. (Previously Presented) The apparatus of claim 34, the electronic circuitry further configured to:

choose as a preferred unavailable code one having the lowest number of assigned lower bit rate codes.

37. (Currently Amended) The apparatus of claim 34, the electronic circuitry further configured to:

choosing as a preferred unavailable code one having a lowest degree of unavailability.

38. (Previously Presented) The apparatus of claim 34, the electronic circuitry further configured to:

choose as a preferred unavailable code for reallocation one having the lowest number of assigned lower bit rate codes in a code subtree, and in case there are more than one such unavailable code, choosing one having a lowest unavailability level.

39. (Currently Amended) A system for modulating an information signal in a telecommunication system, in which spreading codes are used for discriminating between user signals, said codes being allocated for incoming call requests by selecting them from one or more code structures having codes of different bit rates, comprising electronic circuitry configured to:

note a desired bit rate of a code to be allocated for an incoming call request,

determine an availability of codes having the desired bit rate,

if there is one available code of the desired bit rate, allocate the one available code of the desired bit rate, and

if there is more than one code of the desired bit rate available, allocate a code in accordance with pre-selected rules so as to prioritize codes preserving a the highest possible number of available higher bit rate codes and to maximize the probability of future release of a higher bit rate code.